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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,962	01/22/2002	Hiroshi Kawai	218354US0	2000

22850 7590 03/12/2003

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EXAMINER

BOYKIN, TERRESSA M

ART UNIT PAPER NUMBER

1711

DATE MAILED: 03/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/050,962

Applicant(s)

KAWAI ET AL

Examiner

Terressa M. Boykin

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 4-19-02; 7-15-02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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- Note that all responses to this action should be sent to Art Unit 1711.
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- **Priority**
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- Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### **35 USC 112, Second Paragraph**

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12 the recited "obtained by....." is unclear and indefinite because it infers that the objective can be obtained by other means, i.e. other than extrusion hydrolysis, or the method of claim 1 and thus fails to meet the requirement of the statute that a claim must particularly point out and distinctly claim what applicant regards as his invention. A suggested phrase may be "produced by" to avoid ambiguity.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action: A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by EP **4547329** see cols. 1, lines 50-68, col. 2 col. 3 lines 54-68, col 4, lines 50-68, example 2 and claims 2 and 3.

With regard to applicants claim 1 and 12, note that reference USP **4547329** discloses is a process for the formation of olefin-vinyl alcohol copolymer pellets which comprises mixing particles of the copolymer with water to obtain a wet cake containing about 20-70% solids by weight to thereby obtain a plasticized mass of the copolymer, thereafter extruding the copolymer at a temperature of about 5.degree.-7.degree. C.

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below the melting point of the mass through a nozzle to form a rod, and dividing the rod into individual pellets. Note particularly that claims 2 and 3 of the reference state that the olefin is ethylene.

Similar to applicants', the reference has discovered that water can be used to plasticize EVOH sufficiently to extrude and pelletize the copolymer at relatively low temperatures. The need for precipitating the copolymer in organic solvents and melting the copolymer is eliminated, thus overcoming the undesirable effects of excessive heat such as discoloration.

With regard to claims 3, 4, 6 and 7, note that in col.3 lines 7-45 the reference states that "Suitable vinyl esters which can be copolymerized with the olefin comonomers and subsequently hydrolyzed to form the olefin/vinyl alcohol copolymers include vinyl ester monomers of the general formula as disclosed in structural formula 1, e.g., vinyl formate, vinyl acetate, vinyl propionate, vinyl butyrate, vinyl benzoate and the like. Preferably, the vinyl ester is vinyl acetate. The preferred olefin/vinyl alcohol materials are ethylene/vinyl alcohol copolymers and wherein the olefin content is from 5 to 40 weight percent based on the weight of the copolymer. The residual ester content of the copolymer should be less than 3% and preferably less than 2% by weight. Most preferably, the residual ester content is less than 1% by weight. In general, olefins having 2 -6 carbon atoms may be used, but ethylene is preferred. The preferred ethylene/vinyl alcohol copolymer resins will contain less than 2% homopolymers. Especially preferred are homopolymers with less than 1% homopolymer.

With regard to claims 5 and 8, note col. 4 line 60 through col. 5 line 10.

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With regard to applicants' claim 10 note that the reference may employ an aqueous sodium hydroxide solution. Noted col. 2 lines 58-60.

With regard to applicants' claim 9 note col. 3 lines 54-65.

With regard to applicants' claim 11 note example 2 lines 55-63; and col. 1 line 9.

### ***Provisional Double Patenting***

Claims 1-12 are provisionally rejected under the judicially created doctrine of double patenting over claim 1 of copending Application No. 10035123 and claim 1 of copending Application No. 09621271. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

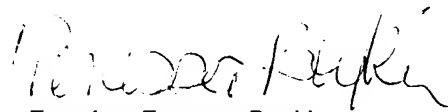
The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: both references are drawn to a method for producing ethylene vinyl alcohol copolymer utilizing the same overall method as claimed in the applicants invention above.

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**Correspondence**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Terressa Boykin, via the receptionist whose telephone number is (703) 308-2351. The examiner can normally be reached on Monday through Friday from 8:00a.m.-2:00p.m.

Tmb

A handwritten signature in cursive script, appearing to read "Terressa Boykin".

**Examiner Terressa Boykin**

**Primary Examiner**

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